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drawing a display of the selectable information element set in a pattern illustrating input key stroke directions for selecting subsets of the selectable information element set with the input key;

detecting a multi-axial key stroke direction from movement of the input key;
identifying from the key stroke direction a selected subset of the selectable information element set;

repeating the detecting action and identifying action for a predetermined number of strokes by the input key so that the identifying step after the last stroke of the input key identifies a selected information element to be loaded into the computing system.

32. (AMENDED) A computer readable medium readable by a computer and encoding instructions for executing a computer process for interpreting directional strokes from a multiple axes input button to enter information into a computing system, said computer process comprising:

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drawing a display page for a display screen, the display page containing information elements arranged in a pattern to guide selection of information elements by directional strokes of the input button;

detecting multi-axial directional strokes by the input button; and
identifying an information element for entry in the computing system, the information element identified based on a sequence of directional strokes detected by the adapter.

A marked-up copy of amended claims 1, 9, 15, 20, 26, and 32 is attached.

REMARKS

Claims 1-38 are presented in the application. As discussed during the telephonic interview with Examiner Nguyen on March 25, 2003, claims 1, 9, 15, 20, 26, and 32 have been amended as proposed. Specifically, these claims have been amended, for clarity, to include a reference to multiple axes previously presented in claims 12, 29, and 31. Therefore, this amendment presents no new matter and should be entered. To conclude the interview, it was agreed that the amendment would be entered and a new, non-final Office Action or a Notice of Allowance would be issued.

In the Office Action mailed January 14, 2003 claims 1-10, 14-22, 26-27 and 32-35 were rejected under 35 U.S.C. 102(b) as being anticipated by the Luo reference (U.S. Patent 6,378,234).

However, as agreed in the interview, claims 1-38 are distinguishable from Luo. Specifically, the Luo reference does not teach or suggest a multiple axes key, joystick or button. In the Luo reference, all of the keys are simple push button type keys having only a single axis. A keystroke in Luo allows the key to travel up and down only along this single axis. Luo does not teach or suggest a key movable along more than one axis, and thus does not teach or suggest a multi-axial input key. For at least this reason, claims 1-38, as amended, are distinguishable from Luo and should be allowed.

Respectfully submitted,



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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Eric Lang	Examiner:	Nguyen, K.
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Title:	J-KEY INPUT FOR COMPUTER SYSTEMS		

MARKED-UP COPY OF AMENDED CLAIM

1. (AMENDED) Method for inputting information in an information processing device having [an] a multiple axes input key movable in M multi-axial directions, said method comprising the acts of:

moving the key in one of the M multi-axial directions to generate a selection stroke;
repeating said act of moving the key N number of times to generate N selection strokes, a pattern of N selection strokes with each stroke being in one of M multi-axial directions defining the information to be input to the information processing device.

9. (AMENDED) A method for interpreting a sequence of input strokes by a [multi-directional] multiple axes input key to input an information element into a computing system, said method comprising:

drawing a display of the selectable information element set in a pattern illustrating input key stroke directions for selecting subsets of the selectable information element set with the input key;

detecting a multi-axial key stroke direction from movement of the input key;
identifying from the key stroke direction a selected subset of the selectable information element set;

repeating the detecting action and identifying action for a predetermined number of strokes by the input key so that the identifying step after the last stroke of the input key identifies a selected information element to be loaded into the computing system.

15. (AMENDED) A user interface method in a computing system for inputting a plurality of information elements through a single input device capable of [multi-directional] multiple axes strokes, said interface method comprising:

entering a multi-axial directional stroke with the input device to select a subset of information elements to be selected;

repeating said entering step a predetermined number of times until an desired information element is selected and where the predetermined number is identical for each input of a selected information element.

20. (AMENDED) A computing system for interpreting directional strokes from [an] a multiple axis input button to enter information into the computing system, said computing system comprising:

a display processor drawing a display page for a display screen, the display page containing information elements arranged in a pattern to guide selection of information elements by directional strokes of the input button;

an input adapter detecting multi-axial directional strokes by the input button;

a stroke processor identifying an information element for entry in the computing system, the information element identified based on a sequence of multi-axial directional strokes detected by the adapter, the number of strokes in a sequence being the same for all information elements.

26. (AMENDED) A computer readable medium readable by a computer and encoding instructions for executing a computer process for interpreting a sequence of input strokes by a [multi-directional] multiple axes input key to input an information element into a computing system, said method comprising:

✓ drawing a display of the selectable information element set in a pattern illustrating input key stroke directions for selecting subsets of the selectable information element set with the input key;

detecting a multi-axial key stroke direction from movement of the input key;

identifying from the key stroke direction a selected subset of the selectable information element set;

repeating the detecting action and identifying action for a predetermined number of strokes by the input key so that the identifying step after the last stroke of the input key identifies a selected information element to be loaded into the computing system.

32. (AMENDED) A computer readable medium readable by a computer and encoding instructions for executing a computer process for interpreting directional strokes from [an] a multiple axes input button to enter information into a computing system, said computer process comprising:

drawing a display page for a display screen, the display page containing information elements arranged in a pattern to guide selection of information elements by directional strokes of the input button;

detecting multi-axial directional strokes by the input button; and

identifying an information element for entry in the computing system, the information element identified based on a sequence of directional strokes detected by the adapter.